**Steiner's Professional Outreach Strategy for Tundra Nutrient Seasonality:**

**What opportunities do you have to share your experience with teachers in your district or state (i.e. conferences, workshops, in-service days, etc.)?**

I've already initiated interactions with other teachers in our district. I've visited the classrooms of 8 different teachers in our district, and all have wanted a follow-up next fall after I return. Once we get the I-mold interactive lessons ready, our district can do an in-service day with all our science teachers, and I will be able to share those lessons. My principal and I have also contacted our New Schools project coach, and she is arranging for me to present my experience to teachers at our fall New Schools conference. I will also work up a presentation for our NC Science Teachers Association meeting in November; and hopefully collaborate with Nick LaFave to co-present new activities and lessons we develop from our tundra experience. Of course the NCSTA will be a great place to unveil the I-Mold lessons, as well.

*I have not yet followed up with those teachers. I believe it would still be useful to have presentations with those teachers and their current students; I'm sure they would be open to the topics of Arctic research, how scientists work, and actual slides from my work in Alaska. I did presentations at the New Schools fall conference and at the NCSTA meeting in Winston-Salem this fall. My presentation for the New Schools conference went well, highlighting research topics and opportunities to bring authentic science into the classroom. Nick and I presented a well attended presentation about PolarTREC and our experiences. Our I-mold lessons are not currently ready.*

*I feel that I am just beginning to figure out ways to integrate my experience into my classes. I struggled with new curriculum and new tests this fall, but should have those under control as spring wears on. I also have a student teacher for fall 2013 semester, which makes it much easier for me to leave my classroom and do presentations around the county. Budget outlooks being what it is, I don't foresee an in-service day with the other science teachers. I am still thinking of ways to share with them, especially to make them aware of upcoming expeditions and webinars.*

I've also recently spoken with my former Western Carolina University science education university professor, and he is spreading the word about my trip to his colleagues and developing science educators. They will be following my expedition and I will want to put them on the list for our webinar. I would like to work with him more this fall and host a workshop to facilitate other teachers' learning about polar science and using engaging inquiry based lessons. The I-Mold interactive online lessons will be great to introduce, as well as many hands on lessons from the PolarTREC resources base.

*The above mentioned professor, Kefyn Catley, and I have had discussions this fall and he is very supportive of my efforts to bring polar research into my classes. I would like to work up several lessons and get with him to do a short class with his pre-service teachers. Realistically, I will be working on lessons this spring that I can present next fall.*

**What can you do to prepare other teachers in your school or district for following your expedition? Do they need access to technology or specific training?**

The other 3 teachers in my school are interested, of course, but they have their disciplines of social studies, English, and math to teach. Next fall I hope to introduce several lesson plan ideas that will be cross-disciplinary, believing that we can work together to bring polar research into all our classrooms. I have been traveling to various classrooms in the district to introduce my expedition, and have talked with ages ranging from pre-K through 12. I think my most interested groups outside my classroom will be from the 7th and 5th grade groups I spoke with. All of our schools have Active-Boards and projectors, many have laptops or IPads, so technology and access is not a real issue. Many of our students, on the other hand, only have access to Internet at school, so it will be hard for many to follow my expedition during the summer months.

*I'm pretty sure my colleagues didn't follow my expedition this summer. However, the English teacher and I discussed last week having my students read Barbara Kingsolver's Flight Behavior. Although we won't combine our lessons, she will work with me on ideas of how to work with the kids as the read through the book. We are working to see if our budget allows us to by E-copies for their laptops.*

**Are there connections you can make in your school outside the science department?**

I am the science department, so all connections made in our school are schoolwide and include the other 3 departments. *Still the same situation*

**Are there regional, state, national, or international conferences that you would be interested in presenting this experience to?** I believe I will be set up to present at regional (new schools), and state (NCSTA) conferences. I have never attended a national NSTA conference, or an international one, so of course I'd love to. The recent IPY conference in Montreal looked very inspiring and useful. I would also like to make some time to re-connect with my former Schoolyard LTER contacts, and possibly arrange to present at an Education section of the LTER conference in the upcoming year.

*I am trying to get caught up on current work with the new curriculum, and still digesting my PolarTREC experience. Yes, I would like to get further involved in polar research and education.*

**Where do you plan to share lesson plans or other materials created for your expedition?**

I will be testing lesson plans on my own students, and then working with science teachers from each of the other schools to gain feedback and assist them in finding ways to implement the lessons in their own classrooms. I'm fortunate to have good working relations with our other science teachers, especially those in the district's 5-6 school, the middle school, and our high school. I believe to have success in implementing new plans is to have other teachers actually using the lessons or materials. I think the best way to do that is to host a workshop or in-service day and actually go through the lessons, and provide necessary materials to do the activities that aren't computer based. I would like to be able to request a small amount of money for materials, basic items for labs that we might develop. I have found that as a teacher, the lab experiment I'm most likely to use is the one that is the most ready to use. *One of the lessons I am working on is to measure litter decomposition on our different school sites. I think this would be a good activity other teachers would be interested in and be able to do. I need to get it set up at my own school first, and work a few bugs out.*